

# AC axial fan - HyBlade

sickle-shaped blades (S series)

with guard grille for short nozzle

S4D300-AS34-50 ebmpapst Datasheet

[sales@fansco.com](mailto:sales@fansco.com)

[www.fansco.com](http://www.fansco.com)

Limited partnership · Headquarters Mulfingen

Amtsgericht (court of registration) Stuttgart · HRA 590344

General partner Elektrobau Mulfingen GmbH · Headquarters Mulfingen

Amtsgericht (court of registration) Stuttgart · HRB 590142

## Nominal data

<b>Type</b>	<b>S4D300-AS34-50</b>		
<b>Motor</b>	<b>M4D068-CF</b>		
Phase		3~	3~
Nominal voltage	VAC	400	400
Wiring		Y	Y
Frequency	Hz	50	60
Method of obtaining data		ml	ml
Valid for approval/standard		CE	CE
Speed (rpm)	min <sup>-1</sup>	1300	1400
Power consumption	W	68	90
Current draw	A	0.14	0.15
Max. back pressure	Pa	60	70
Max. back pressure	inH <sub>2</sub> O	0.24	0.28
Min. ambient temperature	°C	-25	-25
Max. ambient temperature	°C	60	55

ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment

Subject to change



# AC axial fan - HyBlade

sickle-shaped blades (S series)

with guard grille for short nozzle

## Technical description

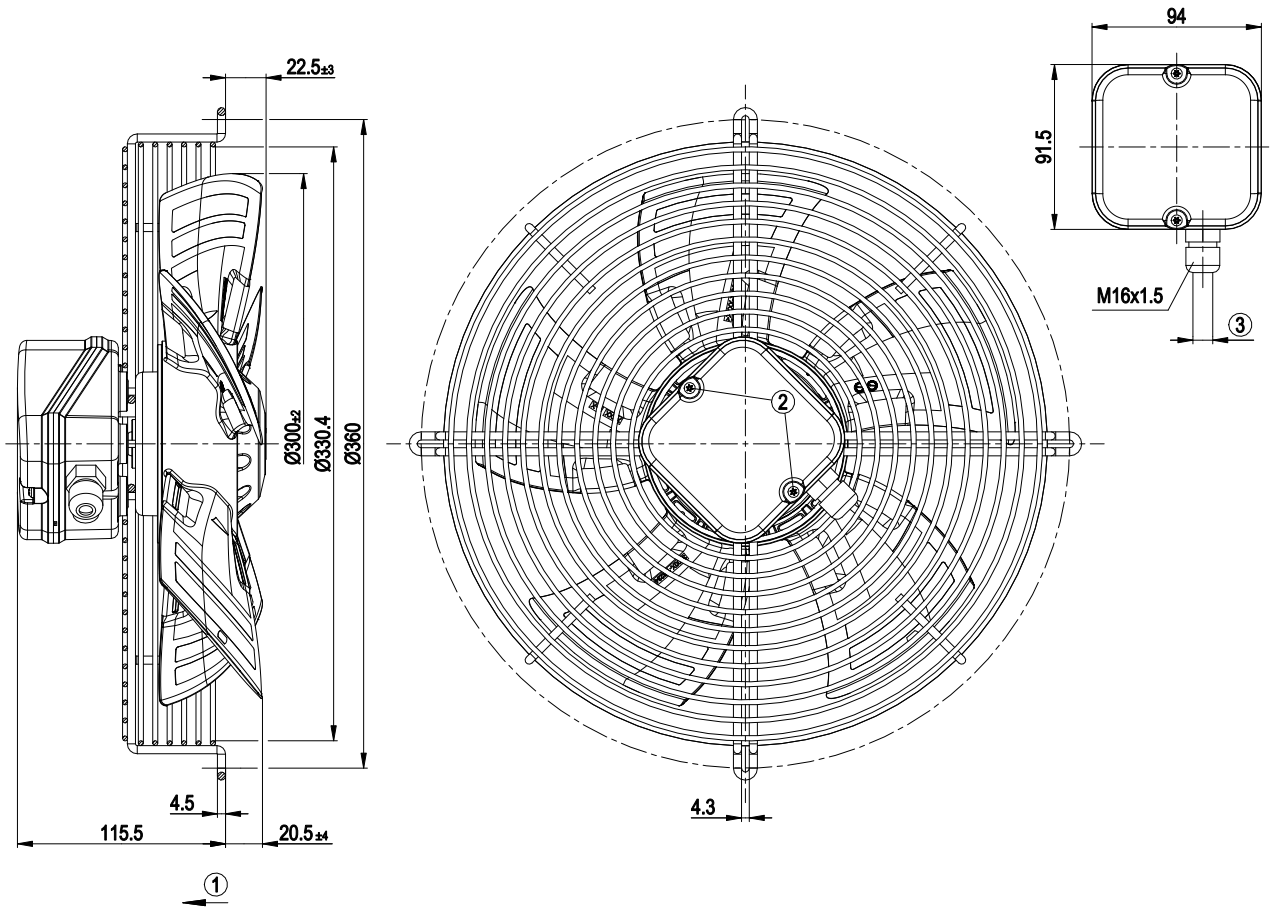
Weight	2.7 kg
Fan size	300 mm
Rotor surface	Painted black
Terminal box material	ABS plastic
Blade material	PP plastic
Guard grille material	Steel, coated with black plastic (RAL 9005)
Number of blades	5
Airflow direction	"V"
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent
Insulation class	"B"
Moisture (F) / Environmental (H) protection class	H0+
Max. permitted ambient temp. for motor (transport/storage)	+ 80 °C
Min. permitted ambient temp. for motor (transport/storage)	- 40 °C
Installation position	Any
Condensation drainage holes	None
Mode	S1
Motor bearing	Ball bearing
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	< 0.75 mA
Electrical hookup	Via terminal box
With cable	Axial
Protection class	I (with customer connection of protective earth)
Conformity with standards	EN 60335-1, motor does not have factory-installed overheating protection; CE
Approval	CCC



# AC axial fan - HyBlade

sickle-shaped blades (S series)  
with guard grille for short nozzle

## Product drawing



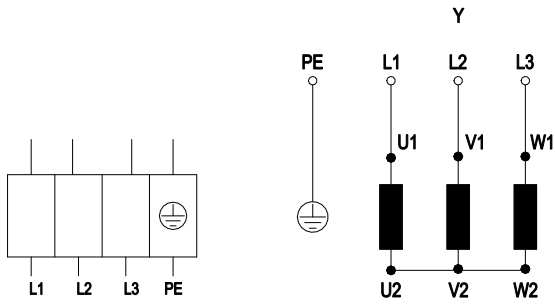
1	Direction of air flow "V"
2	Tightening torque 0.5 ± 0.1 Nm
3	Cable diameter max. 7.5 mm, tightening torque 1.3 ± 0.2 Nm



# AC axial fan - HyBlade

sickle-shaped blades (S series)  
with guard grille for short nozzle

## Connection diagram



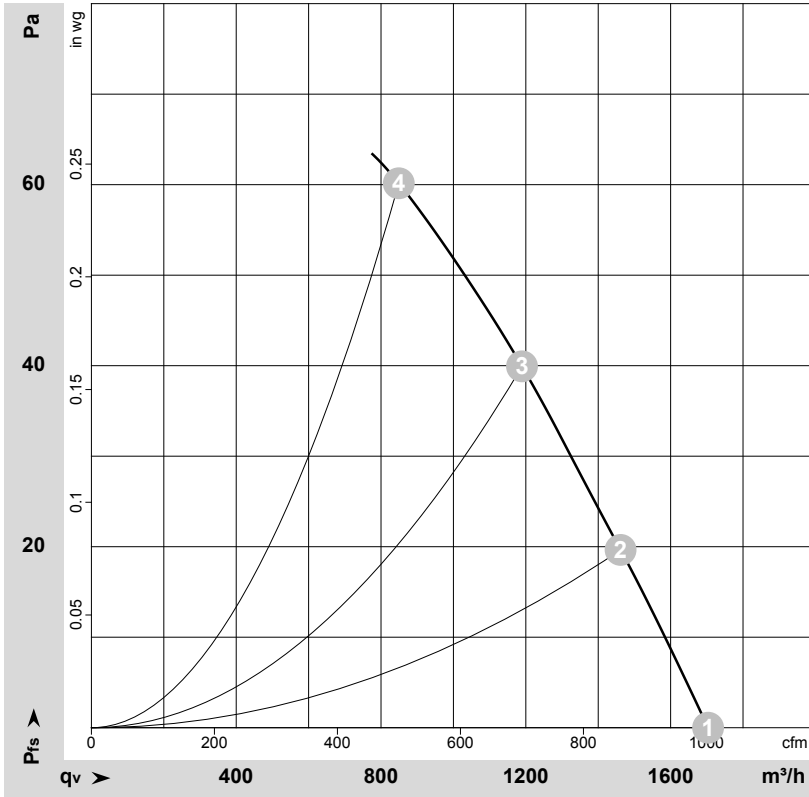
Y	Star connection	L1	black	L2	blue
L3	brown	PE	green/yellow		



# AC axial fan - HyBlade

sickle-shaped blades (S series)  
with guard grille for short nozzle

## Curves: Air performance 50 Hz



$\rho = 1.15 \text{ kg/m}^3 \pm 2 \%$

Measurement: LU-114649-1

Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebmpapst. Intake sound level: Sound power level according to ISO 13347 / sound pressure level measured at 1 m distance from fan axis. The values given are valid under the specified measuring conditions and may vary due to conditions of installation. For deviations from the standard configuration, the parameters have to be checked on the installed unit.

## Measured values

	Wired	U	f	n	P <sub>e</sub>	I	LpA <sub>in</sub>	LwA <sub>in</sub>	q <sub>v</sub>	P <sub>fs</sub>	q <sub>v</sub>	P <sub>fs</sub>
		V	Hz	min <sup>-1</sup>	W	A	dB(A)	dB(A)	m <sup>3</sup> /h	Pa	CFM	inH <sub>2</sub> O
1	Y	400	50	1370	53	0.13	52	59	1705	0	1000	0.00
2	Y	400	50	1350	57	0.13	51	58	1460	20	860	0.08
3	Y	400	50	1335	61	0.13	51	58	1190	40	700	0.16
4	Y	400	50	1300	68	0.14	57	65	850	60	500	0.24

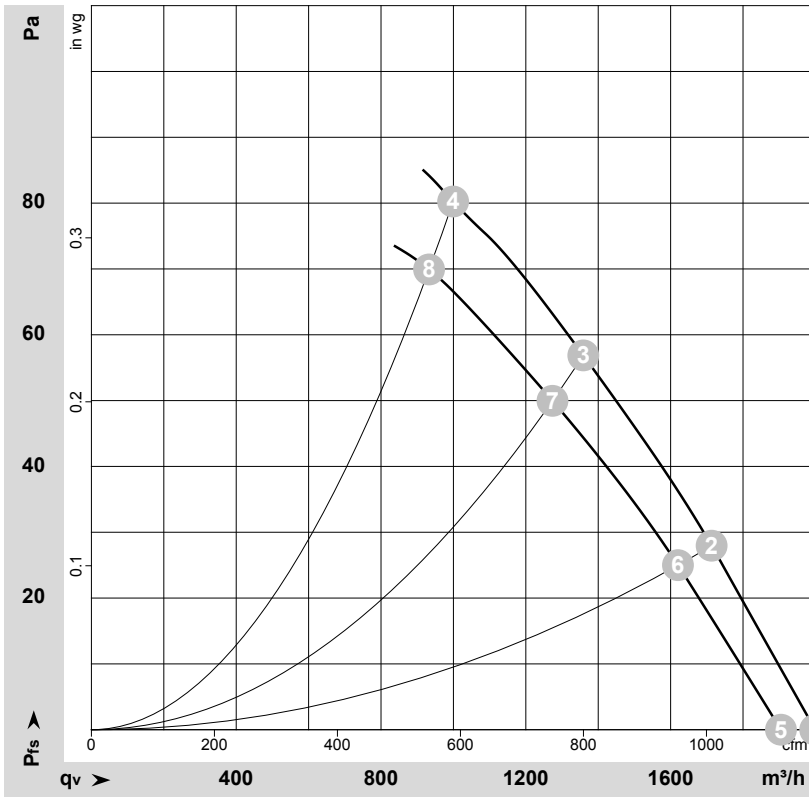
Wired = Wiring · U = Power supply · f = Frequency · n = Speed (rpm) · P<sub>e</sub> = Power consumption · I = Current draw · LpA<sub>in</sub> = Sound pressure level intake side · LwA<sub>in</sub> = Sound power level intake side  
q<sub>v</sub> = Air flow · P<sub>fs</sub> = Pressure increase



# AC axial fan - HyBlade

sickle-shaped blades (S series)  
with guard grille for short nozzle

## Curves: Air performance 60 Hz



$\rho = 1.15 \text{ kg/m}^3 \pm 2 \%$

Measurement: LU-114654-1  
Measurement: LU-114653-1

Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebm-papst. Intake sound level: Sound power level according to ISO 13347 / sound pressure level measured at 1 m distance from fan axis. The values given are valid under the specified measuring conditions and may vary due to conditions of installation. For deviations from the standard configuration, the parameters have to be checked on the installed unit.

## Measured values

	Wired	U	f	n	P <sub>e</sub>	I	LpA <sub>in</sub>	LwA <sub>in</sub>	qv	P <sub>fs</sub>	qv	P <sub>fs</sub>
		V	Hz	min <sup>-1</sup>	W	A	dB(A)	dB(A)	m <sup>3</sup> /h	Pa	CFM	inH <sub>2</sub> O
1	Y	480	60	1605	79	0.14			2000	0	1175	0.00
2	Y	480	60	1580	86	0.14			1715	28	1010	0.11
3	Y	480	60	1560	92	0.15			1360	57	800	0.23
4	Y	480	60	1510	105	0.16			1000	80	590	0.32
5	Y	400	60	1530	69	0.13	55	62	1905	0	1120	0.00
6	Y	400	60	1495	75	0.13	54	61	1620	25	955	0.10
7	Y	400	60	1460	80	0.14	54	61	1275	50	750	0.20
8	Y	400	60	1400	90	0.15	60	68	935	70	550	0.28

Wired = Wiring · U = Power supply · f = Frequency · n = Speed (rpm) · P<sub>e</sub> = Power consumption · I = Current draw · LpA<sub>in</sub> = Sound pressure level intake side · LwA<sub>in</sub> = Sound power level intake side  
qv = Air flow · P<sub>fs</sub> = Pressure increase

